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PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	<b>Application Number</b>	10/021,663	
	<b>Filing Date</b>	10/23/2001	
	<b>First Named Inventor</b>	Mann et al.	
	<b>Group Art Unit</b>	1724	
	<b>Examiner Name</b>	I. Cintins	
<b>Total Number of Pages in This Submission</b>	10	<b>Attorney Docket Number</b>	LIT-PI-544

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <b>Return Receipt Postcard</b>
<b>Remarks</b>		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Stephen R. Christian Registration No.: 32,687
Signature	
Date	11 DEC 2003

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 12/11/03			
Typed or printed name	Mandy Landon		
Signature	Mandy Landon	Date	12/11/03

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# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$)

180.00

## Complete if Known

Application Number	10/021,663
Filing Date	10/23/2001
First Named Inventor	Mann et al.
Examiner Name	I. Cintins
Group Art Unit	1724
Attorney Docket No.	LIT-PI-544

## METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number: 05-0565  
Deposit Account Name:

☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☐ Payment Enclosed:

☐ Check ☐ Credit card ☐ Money Order ☐ Other

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101 740	201 370	Utility filing fee	
106 330	206 165	Design filing fee	
107 510	207 255	Plant filing fee	
108 740	208 370	Reissue filing fee	
114 160	214 80	Provisional filing fee	

SUBTOTAL (1) (\$)

### 2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	18.00	
Multiple Dependent Claims	-3** =	86.00	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103 18	203 9	Claims in excess of 20
102 84	202 42	Independent claims in excess of 3
104 280	204 140	Multiple dependent claim, if not paid
109 84	209 42	** Reissue independent claims over original patent
110 18	210 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for ex parte reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 400	216 200	Extension for reply within second month	
117 920	217 460	Extension for reply within third month	
118 1,440	218 720	Extension for reply within fourth month	
128 1,960	228 980	Extension for reply within fifth month	
119 320	219 160	Notice of Appeal	
120 320	220 160	Filing a brief in support of an appeal	
121 280	221 140	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding	
140 110	240 55	Petition to revive - unavoidable	
141 1,280	241 640	Petition to revive - unintentional	
142 1,280	242 640	Utility issue fee (or reissue)	
143 460	243 230	Design issue fee	
144 620	244 310	Plant issue fee	
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Processing fee under 37 CFR 1.17(q)	
126 180	126 180	Submission of Information Disclosure Stmt	180.00
581 40	581 40	Recording each patent assignment per property (times number of properties)	
146 740	246 370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149 740	249 370	For each additional invention to be examined (37 CFR § 1.129(b))	
179 740	279 370	Request for Continued Examination (RCE)	
169 900	169 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

180.00

## SUBMITTED BY

Name (Print/Type)	Stephen R. Christian	Registration No. (Attorney/Agent)	32,687	Telephone	208-526-9140
Signature	<i>Stephen R. Christian</i>	Date	11 DEC 2003		

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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re Application of:**

Mann et al.

**Serial No.:** 10/021,663

**Filed:** October 23, 2001

**For:** COMPOSITE MEDIA FOR ION  
PROCESSING

**Confirmation No.:** 5564

**Examiner:** I. Cintins

**Group Art Unit:** 1724

**Attorney Docket No.:** LIT-PI-544

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence along with any attachments referred to or identified as being attached or enclosed is being deposited with the United States Postal Service as First Class Mail on the date of deposit shown below with sufficient postage and in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

12/11/2003  
Date

Mandy Landon  
Signature

Mandy Landon  
Name (Type/Print)

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 or PTO/SB/08 be considered by the Examiner and made of record. Copies of the listed documents are enclosed pursuant to 37 C.F.R. § 1.98(a).

In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as

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defined in 37 C.F.R. § 1.56(b). Further, no representation is made by Applicants herein that no other possible material information as defined in 37 C.F.R. § 1.56 (b) exists.

#### U.S. Patent Documents

<u>U.S. Patent No.</u>	<u>Publication Date</u>	<u>Patentee</u>
US - 4,548,790	10/1985	Horwitz et al.
US - 4,683,124	07/1987	Muscatello et al.
US - 4,826,604	05/1989	Faubel et al.
US - 4,835,107	05/1989	Horwitz et al.
US - 5,169,609	12/1992	Horwitz et al.
US - 5,637,506	06/1997	Goken et al.

#### Other Documents

MUSCATELLO et al., Chem. Sep., vol. 2, pp. 439-48, 1986.  
 MUSCATELLO et al., ACS Symp. Ser., 347, pp. 182-9, 1987.  
 SEBASTA et al., J. Radioanal. Nucl. Chem. 140(1), pp. 15-21, 1990.  
 SCHULTE et al., Sep. Sci. Technol., 30(7-9), pp. 1833-47, 1995.  
 LUMETTA et al., Solvent Extr. Ion Exch., 14(1), pp. 35-60, 1996.  
 SCHULTE et al., Proc. Embedded Top Meet. DOE Spent Nucl. Fuel Fissile Mater. Manage., pp. 418-427, 1996.  
 SEBESTA et al., R. Soc. Chem., 182, pp. 346-354, 1996.  
 MILLER et al., Sep. Sci. Technol., 32(1-4), pp. 37-50, 1997.  
 SEBESTA et al., Acta Polytech., 38(3), pp. 119-120, 1998.  
 BREWER et al., Czech. J. Phys. 49, pp. 959-964, 1999.  
 JOHN et al., NATO Sci. Ser., Ser. 2, 53, pp. 155-168, 1999.

Applicants offer to supply any explanation or discussion of the documents which the Examiner feels is necessary or desirable and which is requested.

**Serial No. 10/021,663**

This Supplemental Information Disclosure Statement is filed after the mailing date of the first Office Action on the merits.

The fee pursuant to 37 C.F.R. § 1.17(p) is enclosed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stephen R. Christian", written in a cursive style.

Stephen R. Christian  
Registration No. 32,687  
Attorney for Applicants  
P.O. Box 1625  
Idaho Falls, ID 83415-3899  
Phone: (208) 526-9140  
Fax: (208) 526-8339

Date: 12/11/2003

Enclosures: Form PTO-1449 or PTO/SB/08  
Copy of documents cited

Application Number	10/021,663
Filing Date	October 23, 2001
First Named Inventor	Mann et al.
Group Art Unit	1724
Examiner Name	I. Cintins
Attorney Docket Number	LIT-PI-544

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

2

of

2

**Complete if Known**

Application Number	10/021,663
Filing Date	October 23, 2001
First Named Inventor	Mann et al.
Group Art Unit	1724
Examiner Name	I. Cintins
Attorney Docket Number	LIT-PL 544

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		MUSCATELLO et al., Chem. Sep. vol. 2, pp. 439-48, 1986.	
		MUSCATELLO et al., ACS Symp. Ser., 347, pp. 182-9, 1987.	
		SEBASTA et al., J. Radioanal. Nucl. Chem. 140(1), pp. 15-21, 1990.	
		SCHULTE et al., Sep. Sci. Technol., 30(7-9), pp. 1833-47, 1995.	
		LUMETTA et al., Solvent Extr. Ion Exch., 14(1), pp. 35-60, 1996.	
		SCHULTE et al., Proc. Embedded Top Meet. DOE Spent Nucl. Fuel Fissile Mater. Manage., pp. 418-427, 1996.	
		SEBESTA et al., R. Soc. Chem., 182, pp. 346-354, 1996.	
		MILLER et al., Sep. Sci. Technol., 32(1-4), pp. 37-50, 1997.	
		SEBESTA et al., Acta Polytech., 38(3), pp. 119-120, 1998.	
		BREWER et al., Czech. J. Phys. 49, pp. 959-964, 1999.	
		JOHN et al., NATO Sci. Ser., Ser. 2, 53, pp. 155-168, 1999.	

Examiner  
SignatureDate  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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